

## Further Notes on Species of the Genus *Aloeides* (Lepidoptera: Lycaenidae)

By G. E. TITE<sup>1</sup> and C. G. C. DICKSON, M.Sc.<sup>2</sup>

A gratifying result of the publication of two papers by the present authors (1968 and 1973) is the increased interest in this genus that has been shown by entomologists, especially those in South Africa. Many specimens have been sent to the authors for identification; some of which, do clearly represent species new to science, and render the following descriptions desirable. To avoid needless repetition, the characters of the wing pattern are referred to by the terms previously suggested (Tite and Dickson 1968: 370, figs. 1-2), and reference is made chiefly to those characters which exhibit significant differences. Acknowledgements are made to the authorities of the Hope Department, University Museum, Oxford, in particular to Professor G. C. Varley, to the late Mr. K. M. Pennington of Balgowan, Natal, and to Mr. V. L. Pringle of Huntly Glen, Bedford, Cape Province.

### *Aloeides pringlei* sp. n.

Plt. V, figs. 1 to 4

The discovery of this species by the late Mr. K. M. Pennington and Mr. V. L. Pringle is described below in Mr. Pringle's own words: "On the 12th November, 1969, Mr. K. M. Pennington and I climbed the Great Winterberg as he was anxious to see if any butterflies worked their way up to the top around mid-day as they so often do. There was not a sign of anything on the top. We then worked our way down to the lower slopes, and it was at an altitude of approximately 6,800 ft. according to the Trigonometrical Survey Map that K.M.P. caught two specimens of this *Aloeides* and immediately remarked on the bright and distinctly marked underside, and said that he thought it could prove to be an interesting discovery. The top of the Winterberg is 7,772 ft.

"In 1970 two visits to the spot during November yielded nothing, it was a particularly bad year as we had had no rain during September-November, and a severe frost on the 6th November and cold weather almost throughout. There were very few butterflies out anywhere in this area.

"On the 23rd November, 1971, I again visited the area, and on this occasion found a few specimens out, these I sent on to K.M.P. He was then more certain than before that this insect was at least different from anything which he had come across.

"K.M.P. again visited us in November 1972 and on the 13th we revisited the area, and on this occasion found them flying in fair numbers, most of them freshly emerged, but a few had been out a few days. It was from this collection that I sent the specimens to you (G.E.T.) and to Mr. Dickson. I

<sup>1</sup> 96 Dundale Road, Tring, Hertfordshire, HP23 5BZ.

<sup>2</sup> Blencathra, Cambridge Avenue, St. Michael's Estate, Cape Town 8001.

went up again on the 21st November and found a few still flying, these appeared to be fairly worn, but I did take three fresh specimens. On this occasion, I also found two specimens at the foot of the mountain.

"The area in which this *Aloeides* is found appears to be very restricted and a wide search shows that the species is confined to quite a small area covering a slight depression running down into the valley. The soil is sandy loam and the stone and rock all sandstone, the entire area being overgrown with a coarse *Danthonia* grass and an encroaching shrub *Chrysocoma tenuifolia*. The locality is subject to snow cover during the winter, and faces the cold west winds."

On capturing the first specimens, Mr. Pennington was struck by their resemblance to *Aloeides pallida pallida*, and the capture of further examples has confirmed that there is close affinity with that species. The new species can be distinguished from *pallida* by its rather less robust build, the deeper tone of the ground colour on all wings above, the narrower blackish margins above, and by the complete absence of a cloudy dusky area surrounding the spots of the submarginal series in areas 1, 2, and 3 on the underside of the forewing.

Length of forewing: ♂ 16-17 mm.; ♀ 17-18.5 mm.

Facies: Apart from the normal difference in wing shape, the sexes do not differ in colouring or markings. On the upper-side, the ground colour is clear tawny-orange, only slightly deeper in tone than that of *Aloeides vansoni*; the veins are of the same hue, and are not darkened by dusky scales as in *Aloeides thyra*, but a darkening of dusky scales is present at the bases of the wings. On the forewing, the distal band is much as in *A. pallida grandis*, but is slightly narrower, being approximately 2.5 mm. in width at vein 3, widening slightly as it approaches the hind angle; its inner edge is straight and clear cut. The apical patch is large and triangular, its lower edge meeting the inner edge of the distal band below vein 5. The grey-white fringes are heavily chequered with fuscous at the vein ends. On the hindwing, the apical patch extends from two-thirds of the costa to vein 4 in the form of a band; its inner edge is somewhat irregular, with a clouding of dusky scales extending into the orange area. From vein 4 to the tornus, the discal lunules are strongly marked and continuous. The fringes are dingier and less obviously chequered than are those of the forewing.

On the underside, the forewing is tawny-orange, with a triangular black patch in the angle of the median vein and vein 1A, followed in some individuals by an irregular double black spot in the same cellule. The three cell spots are heavily ringed with black, and have shining white centres, the discoidal one being bipupilled. Five spots comprise the median series: that in area 2 is black, often tending to obsolescence; that in 3 is larger and rounded; those in areas 3 to 6 are all black, inwardly marked with white, the one in 6 being dash-like in shape, and placed diagonally; the spots in areas 4 and 6 are placed well distad of those in areas 2, 3 and 5. In the marginal

series, the black spots in areas 1, 2 and 3 are large, but are quite without the clouding of dusky scales which is so obvious in *A. pallida*, except that one male does exhibit some slight clouding near the spot in area 1. The spots in areas 4-7 are smaller, and are marked with white inwardly. In some examples, including the holotype, the costal and distal areas are coloured olive-fuscos; in others, this colour is replaced by deep crimson. On the hindwing, the ground colour also varies individually from olive-fuscos to crimson; the whitish-grey spotting is arranged much as in *A. pallida grandis*, the marginal and median series being edged outwardly by a dentate dusky line, and the costal and basal spots ringed with black. There is no indication of white marginal dots on either wing.

The male genitalia offer no definite distinguishing characters. Holotype ♂. CAPE PROVINCE, Winterberg, xi.1972 (V. L. Pringle), in University Museum, Oxford.

Paratypes. CAPE PROVINCE: Winterberg, xi.1969 and 1972 (K. M. Pennington and V. L. Pringle), 4 ♂♂, 2 ♀♀ (including ♀ allotype), all in University Museum, Oxford.

*Aloedes rileyi* sp. n.

Plt. V, figs. 5, 6

Length of forewing: ♂ 14 mm.

Only known in the male, it is similar in size and appearance to that sex of *Aloeides oreas* (Tite and Dickson, 1968). The upperside of the forewing differs in that the blackish distal band is narrower, being only 1.5 mm. at vein 2, and increasing only slightly in width towards the apex; the band-like apical patch is not noticeably widened at its juncture with the distal band, and does not extend below vein 6. There is no indication of a discoidal spot. On the upperside of the hindwing, the apical patch is narrow, and its inner edge is not inwardly angled. The fringes are whitish and very heavily chequered with black.

On the underside, the forewing is tawny orange with the costa and apical area a pale olive-brown. In the cell, the median spot is approximately the same distance from the discoidal spot as it is from the basal spot. All three spots have white centres ringed with black, and the discoidal spot is bipupilled, appearing like a figure 8. At the base of the wing is a wedge shaped dusting of dusky scales, but there is no black spot at the base of space 1. The hindwing ground colour is olive-brown with darker shading at the outer edges of the cream spots. The general pattern of the spotting is as in *oreas*, and the median series takes the form of an undulating band, without any really sharp projections. In space 7, the median spot is placed approximately mid-way between the basal and distal spots. The fringes on the forewing are grey, heavily chequered with olive-brown, those of the hindwing being deep olive-brown, only feebly lightened between the veins.

The species is named with pleasure in recognition of Mr. N. D. Riley, who first called attention to the complex then

lumped under *Aloeides thyra* L. (Riley 1938: 233-244), and thus pioneered the elucidation of the group.

Holotype ♂. LESOTHO: Butha Buthe, 13.i.1940 (K. M. Pennington), in University Museum, Oxford.

Paratype. Data as holotype, 1 ♂, in University Museum, Oxford.

*Aloeides taylori* sp. n.

Plt. V, figs. 7, 8

Length of forewing: ♂ 12.5 mm.

The male is similar in appearance to that sex of *A. rileyi*. It differs on the upperside of the forewing in that: the apical patch is definitely triangular, its lower edge extending to vein 5; the distal band is wider, being 2 mm. at vein 2, its inner edge being noticeably concave between the veins; there is a definite indication of a discoidal black spot. The hindwing differs from *A. rileyi*: by the larger apical patch, which is obtusely angled inwardly, and extends to vein 5; the distal lunules are somewhat narrower. On both wings, the fringes are pale grey-fuscous, heavily chequered with black at the vein-ends.

On the underside, the forewing is like that of the previous species, differing by: the presence of a distinct black spot at the base of space 1, near and below the median cell-spot; this median cell-spot is placed much nearer to the basal cell-spot than it is to the discoidal spot; the interspaces of the fringes are much whiter, but are heavily chequered with the ground colour at the vein ends; the discoidal spot has a single white pupil, taking the form of an elongated oval. On the hindwing, the median spot in space 7 is moved outwards, and almost touches the distal spot. The fringes are chequered as those of the forewing, but the interspaces are greyish and far less clearly defined.

The species is named after Mr. E. Taylor of the Hope Department, University Museum, Oxford in recognition of many years of friendly co-operation with both authors.

Holotype ♂. ORANGE FREE STATE: Golden Gates, 3.x.1954 (K. M. Pennington), in University Museum, Oxford.

### References

- Tite, G. E., and Dickson, C. C. C. 1968. The *Aloeides thyra* Complex (Lepidoptera: Lycaenidae), *Bull. Br. Mus. nat. Hist. (Ent.)*, **21** (7): 367-388.
- . 1973. The Genus *Aloeides* and allied Genera (Lepidoptera: Lycaenidae), *Bull. Br. Mus. Nat. Hist. (Ent.)*, **29** (5): 225-280.
- Riley, N. D. R. Descriptions of New or Little known South African Rhopalocera (Lepidoptera), *Trans. R. ent. Soc. Lond.*, **87**: 233-245.

---

HETEROGRAPHIS OBLITELLA (ZELLER) (LEP.: PYRALIDAE: PHYCITINAE) IN ESSEX. — I collected a female of this species at light in my garden on 15.v.1976. — Dr. G. S. ROBINSON, 21 Lakeside, Rainham, Essex.